From wang!elf.wang.com!ucsd.edu!info-hams-relay Wed Apr 10 19:48:08 1991 remote

from tosspot

Received: by tosspot (1.64/waf)

via UUCP; Wed, 10 Apr 91 21:48:49 EST

for lee

Received: from somewhere by elf.wang.com

id aa00282; Wed, 10 Apr 91 19:48:07 GMT

Received: from ucsd.edu by news.UU.NET with SMTP

(5.61/UUNET-shadow-mx) id AA07522; Wed, 10 Apr 91 15:21:59 -0400

Received: by ucsd.edu; id AA19263

sendmail 5.64/UCSD-2.1-sun

Wed, 10 Apr 91 10:16:10 -0700 for nixbur!schroeder.pad

Received: by ucsd.edu; id AA19236

sendmail 5.64/UCSD-2.1-sun

Wed, 10 Apr 91 10:16:03 -0700 for /usr/lib/sendmail -oc -odb -oQ/var/spool/

lqueue -oi -finfo-hams-relay info-hams-list

Message-Id: <9104101716.AA19236@ucsd.edu>

Date: Wed, 10 Apr 91 10:16:00 PDT

From: Info-Hams Mailing List and Newsgroup <info-hams-relay@ucsd.edu>

Reply-To: Info-Hams@ucsd.edu

Subject: Info-Hams Digest V91 #286

To: Info-Hams@ucsd.edu

Info-Hams Digest Wed, 10 Apr 91 Volume 91 : Issue 286

Today's Topics:

(none) (3 msgs)
Commercial Licenses
Doppler RDF Info
Heathkit DX-40?
Info-Hams Digest V91 #284
Info-Hams Digest V91 #285
Licensing Philosophy? (2 msgs)

New ICOM toys?

Propagation Prediction Methods II
QUESTION: SPECTRUM DISPLAY INFORMATION REQUESTED

Regency U11 mods Shuttle Packet

Tuner-less Multiband Wire Antennas WEFAX & remote sensing satellite info wanted

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu> Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu> Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: 10 Apr 91 13:33:04 GMT From: news-mail-gateway@ucsd.edu

Subject: (none)

To: info-hams@ucsd.edu

Date: 09 Apr 91 04:48 Message-ID: <752@KA1SRD>

From: W10J@KA1SRD To: QRM@USBBS

Subject: 10M INDUSTRIAL INVADER, PART 2

Path: K1UGM!K1CF!KC1PK!KA1SRD

I've received several messages back regarding my alert about the "10 METER BAND INDUSTRIAL INVASION". First, I appreciate the response from all and hope there is someone closer to the source of interference that can help track it to an exact location or industry.

I wish to provide the details of the interference again for those who may not have read my earlier message:

Before I describe the nature of the interference as I recieve it, let me point out that my location is in Eastern Massachusetts, about 25 Mi. West of Boston. For those who wish to attempt to receive and DF, keep in mind that I only hear it when the band is open to/from the South Central part of our continent. From all my listening, DF'ing and noting which geographic areas are represented during a band opening, it seems as if the problem interference is possibly coming from Texas, New Mexico or possibly Mexico (?). The interference typically occurs between 28.6 and 29.6 Mhz, with VARIATIONS during the course of the day. A great deal of our 10 meter band is being effected! I bet many operators write this "trash" off as local line noise!

What is heard is a drifting, AC modulated (3 phase x 60 Hz.) signal. This "signal" can be easily detected as it drifts by any one frequency in the AM, SSB or CW mode. It has a very unstable, parisitic sound characteristic and repeats its course in frequency travel every 10 or 20 seconds. As I said, it can be easily heard when the band is open from its origin skip zone AND is typically limited to weekdays! I can't remember a time that it was present (even when the band is open) on a holiday or on weekends! I have worked with dielectric sealers in years past and strongly feel that this is our 10 Meter band invader from industry! These machines can run many KW and normally operate just below

28 Mhz. The FCC provides regulations limiting their radiation and obviously this one, or these, have run amuck.

Our best hope is to find someone who is located within ground wave distance of the offending signal(s) and who has a good directional antenna and or portable DF'ing capability. Yes, I know that the FCC probably does, but we can attempt to make this a cut-and-dry case if more detail is available before calling the FCC in!

Here's the best course of action: Any amateur radio operator with a good 10 meter station and directional antenna should take a listen for the subject interference AS DESCRIBED ABOVE. It is more likely that a W5, W7 or XE station will make the ground wave "find". What this means is that the signal will be heard independent of skip conditions. It may in fact be there (for the ground wave station) when the band is dead, and of course during industrial work hours.

IF YOU HEAR THIS "STUFF" ON GROUNDWAVE AND IT IS AS DESCRIBED, PLEASE help us out by doing the following: Make careful notes. Listen for several weekdays (work days) and confirm that it re-appears according to schedule. It rarely, if ever should be noted on other than industry work days. If you have or know who has a good 10 meter mobile capability, try to track it to an exact location or industry. This would make it almost a cut-and-dry find for the FCC to move in! At this point, please contact your local FCC office and provide exact details. You may wish to provide a copy of this document to assist in the description and the extent of difficulty caused to our band and its operators on a daily basis.

The FCC rules regulating the elimination and investigation of harmful interference caused by Industrial, Scientific and Medical Equpment are covered in Part 18, as are the technical standards.

Thank you to: WA4VZQ, KB2GLO, WB6NOA AND OTHERS for helping so far.

Should you be or feel that you're hot on the trail of our "bands" invader, please drop me a note via packet or phone me during any weekday at (508) 461-5360. 73, Roger Perkins, W10J, Old Bay Road, Bolton, MA 01740.

Packet: W10J @ KA1SRD.MA.USA.NA

Date: 10 Apr 91 15:11:20 GMT From: news-mail-gateway@ucsd.edu

Subject: (none)

To: info-hams@ucsd.edu

In article <1991Apr9.220744.4049@milton.u.washington.edu>
whit@milton.u.washington.edu (John Whitmore) writes:
> No such devices have been built by THAT name in most of
>a century.

Untrue! I build these things regularly, both using tubes and solid-state. (Nostalgia-mode ON)

First 'real' radio i built used battery tubes (1T4, 1S5, 3S4) and covered 2 bands (1.5 to 4 and 4 to 8 MHz). Then i did a similar mains-powered version (6AM6, 6BA6, 6BW6 and 6X4 rectifier) which i still have at home - its great for listening to broadcast-band 'entertainment'.

Solid-state version (2 \times 2N3819, BC109, TBA800 audio IC) was fun too, till it got its front-end FETs melted by rain-static on the antenna.

In the 'old' days (pre-1960's) i guess everyone cut their teeth on the tube versions of these radios; theres some thrill to be had from conjuring Radio New Zealand from a bench-top lashup. And in terms of dynamic range, intermod. performance etc, these radios can put up one hell of a fight, dollar for dollar, against all but the best 'amateur' radios. OK so they lack things like memories and digital readouts (will you ever find the same station twice!) but they WORK!

(Nostalgia-mode OFF)

Theres a convention for describing TRF radios - oldtimers would refer to '0-V-2' and '1-V-1' etc. First digit describes number of signal-frequency amplifying stages, the 'V' is the detector stage, third digit is the number of audio-amplifying stages. What you replace the 'V' with in the case of semiconductor detectors i dont know. But who wants FETs and ICs when you can have a *REAL* radio that *GLOWS IN THE DARK*!

Now where are those plans for the push-pull 813 self-excited-oscillator/PA for the HF bands i was working on......

Pete Lucas PJML@UK.AC.NWL.IA G6WBJ@GB7SDN.GBR.EU

Date: 10 Apr 91 15:51:09 GMT

From: maverick.ksu.ksu.edu!unmvax!uokmax!d.cs.okstate.edu!mmccorm@uunet.uu.net

Subject: (none)

To: info-hams@ucsd.edu

I've heard that same trash on 10 meters from central Oklahoma for several years during band openings. It seems that it is worst during Winter when F2 propogation makes daytime skip distances in the 2,000MI or 3,800KM range.

Those sounds may also be ionispheric sounders though they are sure sloppy. If you tune carefully, you can follow one of them

through the band. I followed one down into the 26MHZ area, once , before it abruptly switched off and started another swishy slide from the high end of 10

down.

I think I've seen a few of those things going up in frequency, also.

Date: 10 Apr 91 15:42:00 GMT From: news-mail-gateway@ucsd.edu Subject: Commercial Licenses

To: info-hams@ucsd.edu

> There are no more phone licenses in USA. There is the

> commercial CW license - 3, 2, 1, required for some

> maritime operations.

And I understand that the commercial CW license is dead after 1998 (or is it 1996?).

steve - W3GRG

Date: 10 Apr 91 15:26:28 GMT

From: usc!zaphod.mps.ohio-state.edu!wuarchive!ukma!s.ms.uky.edu!andreap@ucsd.edu

Subject: Doppler RDF Info
To: info-hams@ucsd.edu

Does anyone have or know anything about an RDF box made by Doppler Systems? It uses 4 antennas, I guess similar to LOJAK, to display the bearing to a transmitter. The readout is in two forms, digital and analog.

An article on these things appeared in 73 magazine several years ago. The kit they mention is no longer available so they suggested I look around for one of the many they sold to the amateur community.

Harold G. Peach, Jr.

252 Ag. Engineering Bldg., U.Ky.

Lexington, KY 40546-0276

Internet: hgpeach@ca.uky.edu
Packet Radio: N4FLZ@KF4NB.KY.USA.NA
Phone: (606) 257-3335

Date: 10 Apr 91 04:54:51 GMT

From: bloom-beacon!bu.edu!rpi!zaphod.mps.ohio-state.edu!unix.cis.pitt.edu!pitt!

w2xo!durham@ucbvax.berkeley.edu

Subject: Heathkit DX-40? To: info-hams@ucsd.edu

```
In article <5216@eastapps.East.Sun.COM> jkeyes@East.Sun.COM writes:
>I picked up an old Heathkit DX-40 transmitter......
>....Heathkit VF-1 VFO and a manual for the DX-40.
>......Did I pay
> too much ($55 including VFO)?
$30-40 would have been my guess, but $55 is OK if you like old rigs.
>- Is there any easy way to get a sidetone out of this rig....
No, you would have to put in an RF detector and sidetone oscillator.
> assume this is AM only? Does anyone use AM anymore?
Yes, screen modulation, as I remember. AM is going through some sort
of resurgence lately. You will find AMers on 75 meters.
>- Can I hook a keyer....
Yes, if it has a relay at the output. If not, you better use one to
isolate the delicate innards of the keyer from the current flowing
through the DX-40 key jack.
>.....Can anyone tell me what the
> phono jack on the back of the VF-1 is for?
The jack is for a key. The VF-1 was the companion piece for the AT-1
transmitter originally. The idea was that you keyed both the 6AG7
oscillator and the 6L6 final in the AT-1 and hooked up the key jack
on the VF-1 in parallel with the AT-1 key jack. This gave you
break-in keying. However, it was not too clean. Lots of chirp.
>Thanks for the help!
Hope it was!
>John
-Jim Durham (durham@w2xo.pgh.pa.us)
______
Date: 10 Apr 91 16:15:53 GMT
From: news-mail-gateway@ucsd.edu
Subject: Info-Hams Digest V91 #284
To: info-hams@ucsd.edu
From: Larry Jack KL7GLK / V77LJ
     > Canidates for the "latest" time zone in the world....
     > According to the OAG, Kwajalein (Pacific Islands Trust Territory)
     > has an offset of -12....
```

Kwajalein has got to have the record. But it is an unusual case. It is located far West of the Date line, but it is still the same day there as in California. But Kwaj is the only atoll out there that observes this weird arrangement. It was done to make life a little easier when conducting the missile tests carried on out there. This is the downrange site of the Vandenberg Missile Range, and idea is to have the missile arrive the same day it was launched. But Kwajalein is the only Atoll in the Marshalls that observes this. This can make life interesting- leave Honolulu one day, land in the Marshall Isand capitol Majuro the next day, fly on to Kwajalein and arrive back on an Hawaiian day. Confirming commercial airline flights is a nightmare.

We say on Kwajalein "its the last place the sun sets in the US"

KL7GLK / V77LJ

Date: 10 Apr 91 16:39:00 GMT From: news-mail-gateway@ucsd.edu Subject: Info-Hams Digest V91 #285

To: info-hams@ucsd.edu

Could you please disconnect this service

MBIAN::OPERATOR (for DR.Mike Hancock)

Date: 10 Apr 91 13:26:50 GMT From: news-mail-gateway@ucsd.edu Subject: Licensing Philosophy?

To: info-hams@ucsd.edu

As I remember it, the Heathkit CB radios came with "sealed" transmitters. As long as you didn't futz with the frequency-determining circuitry or make any modifications to the "sealed" unit, you were within the rules because the rig was type-accepted under those conditions. As far as I know, you can and always could make "minor adjustments" to the CB radio which included tweaking the output matching circuit to the transmission. 73,

line.

Dube N5PDK

Date: 10 Apr 91 15:50:16 GMT

From: usc!zaphod.mps.ohio-state.edu!mips!spool.mu.edu!news.nd.edu!

mentor.cc.purdue.edu!mace.cc.purdue.edu!dil@ucsd.edu

Subject: Licensing Philosophy?

To: info-hams@ucsd.edu

In article <1153@wells.UUCP>, k3tx@wells.UUCP (Dave Heller) writes:

> What's this about needing a 2nd class phone license

to work on a CB rig?

>

- > I lost my phone licenses a few years ago (1st phone)
- > and ended up with a General Certificate which means
- > plain nothing.

The problem is that I am an archaic old (27) fart, and I remembered from ancient times (1975) about the existence of the 2nd Class phone license. I now know that my information was obsolete.

So what kind of certification do you need to be the engineer at a broadcast station?

One more complaint. You sent this using a UUCP address, which I can't reply to, and then didn't include a valid address in the body. I would rather have e-mailed this, to save net bandwidth, but couldn't. Everybody, can you make sure you include a REAL internet address?

Perry G. Ramsey Department of Earth and Atmospheric Sciences dil@mace.cc.purdue.edu Purdue University, West Lafayette, IN USA perryr@purccvm

Sometimes history repeats itself; sometimes it doesn't. So get good odds.

Date: 10 Apr 91 13:44:31 GMT

From: deccrl!news.crl.dec.com!shlump.nac.dec.com!yacht.enet.dec.com!

gettys@decwrl.dec.com
Subject: New ICOM toys?
To: info-hams@ucsd.edu

kenw@col.hp.com (Ken Wyatt) writes: The W2A uses the same accessories as the IC-24AT, which leads me to believe that the 24AT is not long for this world.

Ah, but this is incorrect. Many of the accessories are the same, like the batteries; but there are MAJOR changes!

The charger that comes with it is new because the power connection is new (and VERY non-standard!!) When you plug in the wall charger, the radio shuts off! It looks like the plug is a tri-axial plug instead of just coaxial. It's hard to describe, and since I don't yet have a DC power cord (also new accy's), I can't confirm my suspicions. The speaker mikes and headset are also new. The mike and speaker connections are different. The mike and speaker plug into the same jack! The second jack is for a seco

nd speaker to separate the two bands of audio.

As of yesterday - Icom had not yet given a delivery date or price for the new accy's. The dealer called while I was there to get the info. He didn't even know that he was going to need to carry the new stuff. This was the first one that he had really looked at and hadn't discovered all the quirks yet.

As for the 24AT being on its way out - I fully agree. Icom is closing them out (at by appearances) to the dealers. Instead of the full price - they are discounted by about \$150.

/s/ Bob N1BRM

still discovering new things about the beast

Date: 10 Apr 91 16:10:55 GMT

From: pacbell.com!att!linac!pacific.mps.ohio-state.edu!zaphod.mps.ohio-state.edu!

samsung!rex!uflorida!mlb.semi.harris.com!trantor.harris-atd.com!

x102c.ess.harris.com!blombardi@ucsd.edu

Subject: Propagation Prediction Methods II

To: info-hams@ucsd.edu

Fellow HF freaks...er, enthusiasts....

A week or so ago, I asked if anyone knew of the availability of advanced computer tools for HF propagation prediction. I got a couple of answers, but most assumed I was looking to buy a program. I'm much more interested in learning what is in the source code.

I believe that the minimuf alogorithm comes from the Naval Ocean Science Center, NOSC, those wonderful folks who invented the mininec code. Therefore, it should be in the public domain (assuming it is unclassified) and available, as is all material written under government contract.

The "big boys" use a program called IONCAP, which is available for the PC from the NTIS (National Technical Information Service) for a mere \$129, I hear. It is in Fortran, and takes up seven disks to distribute. Presumably DSDD disks. That's over the threshold of acceptability for me, and I'm more interested in finding something with lower capability at lower cost. (IONCAP includes things that really matter, like antenna gains, noise bandwidths, modulation modes, etc., but these end up being just assumptions for this type of use.)

BTW, for anyone else interested in this area, you should read the article in this month's QST on mid-range propagtion prediction. A real eye-opener. Without trying to spoil the surprise, you could do a better job predicting geomagnetic storms by saying the k index will always be 4!

BTW^2 Does anyone have the address for the QRP ARCI (QRP Amateur Radio Club International, I presume). They are supposed to have some do-it-yourself code in their propagation book.

73, Bob

Bob Lombardi WB4EHS >>>>> Internet: blombardi@x102c.ess.harris.com M/S 102-4826, Harris Corp GASD, P.O. Box 94000, Melbourne, FL 32902 Hobbies: ******* on hold thanks to being a gradual student in EE ****** aspiring classical pianist. Professional: electrical engineer.

Date: 10 Apr 91 13:05:15 GMT

From: sbi!zeuswtc!chi!jl@uunet.uu.net

Subject: QUESTION: SPECTRUM DISPLAY INFORMATION REQUESTED

To: info-hams@ucsd.edu

I recently used a Watkins Johnson Signal Monitor to visually tune signal on HF. The graphic display of the frequency was a valuable help in tuning those weak signals buried in the middle of the AM broadcast. More than before I feel the need of a graphic display of the RF information in the frequency domain. The tool for this is a Spectrum Display or Spectrum Analyser. Most of these tools cost a fortune (to me), however I recently saw an add from Tucker for the following:

Spectrum Analyser

Model: SINGER SPA 3/25A
Frequency range: 1Khz to 25Mhz
Sweep width: 0 to 3Mhz
IF bandwidth: 200Hz to 20Khz
Sensitivity: 25uV to 1.4V

Price: \$395

QUESTIONS:

- 1 Can you comment on this specific model, on Tucker, on the choice of equipment, on the price, on other sources for second hand equipment, etc.
- 2 Can you comment on the use of a Spectrum Analyser and it fitting the monitoring purpose for which it will be used.
- 3 Can you suggest a kit/source for a Spectrum Analyser.

Answers can be either:

Follow up to this article or direct e-mail jl@chi.sbi.com or ...!uunet!sbi!chi!jl or voice at (212) 783-7656 (I would call you right back)

- -

Date: 10 Apr 91 05:01:15 GMT

From: sdd.hp.com!cs.utexas.edu!helios!rigel.tamu.edu!msw1633@ucsd.edu

Subject: Regency U11 mods To: info-hams@ucsd.edu

I have a Regency U11 commercial radio(450 MHz) that I am trying to modify for use in the 440 MHz Ham band. I am having trouble getting the transmitter to tune up. Specifically, no or very little power out. Frequency seems ok, but the amplification is screwy. Still checking components for integrity, but I would like to know if anyone has ever done this modification, or if you have any suggestions.

Mark S. Whitsitt, N5RJF Texas A&M University, Dept of Biochemistry

Bitnet: MSW1633@TAMSIGMA College Station, Tx. 77843-2128 Internet: MSW1633@SIGMA.TAMU.EDU (409) 845-0832

"You can't throw darts when you're empty, man" -- another Schadelism

Date: 10 Apr 91 14:23:27 GMT From: news-mail-gateway@ucsd.edu

Subject: Shuttle Packet To: info-hams@ucsd.edu

There was a short note from W3IWI on a local PBBS to the effect that the SAREX packet experiment was down due to equipment problems. Anyone have details?

Kerry Kingham
U. S. Naval Observatory

WA4BQM kak@CygX3.usno.navy.mil

Washington, D. C.

Date: 10 Apr 91 13:18:18 GMT

From: swrinde!cs.utexas.edu!csc.ti.com!ti-csl!tilde.csc.ti.com!axis!news@ucsd.edu

Subject: Tuner-less Multiband Wire Antennas

To: info-hams@ucsd.edu

I run a modified (shorter) version of the antenna Bill Orr described in his article. Here is a summary of his information I wrote up for the Williamson County ARC.

Multiband Wire Antennas By Ed Humphries - N5RCK

The March 1991 issue of CQ Amateur Radio contains yet another discussion of multiband wire antennas. In his column "Radio FUNdamentals", Bill Orr, W6SAI writes about the original W9CXX multibander with its' complex copper tubing matching section. He then goes on to discuss the popular G5RV developed by R. Varney, which is widely built and commercially available. Orr points out the deficiencies of the G5RV: when built in the original design it delivers reasonable SWR on the 7, 14, and 24 MHz bands, but into a 75 ohm coax feedline that is awkward to load up on modern transceivers; when built with 50 ohm coax

the SWR is poor on all bands, but it performs reasonably well when used with a "transmatch" antenna tuner.

The column skips over an intermediate antenna design discussed in the March 1986 issue of Ham Radio. Bill's column back then pointed out that W5ANB first proved you could successfully modify the G5RV, load it with 50 ohm coax and run without any antenna tuner. But the best design (so far HI) he discusses in both articles is the one by ZS6BKV. Brian Austin used computer modeling to help him design a 5 band tuner-less antenna. Orr's CQ column reprints the design using only the dimensions for a 300 ohm matching section (I presume TV flat lead qualifies). In his original column Orr also presented the figures for using 400 (handmade open-wire leads) or 450 ohm (ladder-line) as the matching section. Since 450 ohm ladder-line is somewhat stronger than the commonly available 300 ohm TV lead-in, I'm here giving both sets of figures so you can make you own choice.

At the end of the matching section Orr recommends a 1:1 balun; others would say that several loops of coax at the feedpoint will do as well to help keep rf off the feedline. The feedline to the transceiver is common 50 ohm coax; RG 58/U is fine for hf for most runs. This antenna should give low SWR on 7, 14, 18, and 24 MHz bands. At 28 MHz the SWR is really only good from 28.5 to 29.0. Tests showed the best SWR curves when the antenna was erected at about 42 feet above ground. When run as an inverted-V (90 degree) the resonant frequency came down 80 kHz for 14 MHz and 125 kHz for 24 and 28 MHz. The March '86 article printed SWR curves, and the March '91 article printed field patterns for all 5 covered bands.

Obviously your results may vary, but this ZS6BKV antenna looks like a real winner for multiband operation without using a tuner. Someone want to give it a try for field day?

Ed Humphries N5RCK Texas Instruments, Inc. 512-250-6894 Internet ed.humphries@hub.dsg.ti.com

```
-. ..... Packet N5RCK@NA4M
Date: 10 Apr 91 08:48:56 GMT
From: sgi!oilean!joe@decwrl.dec.com
Subject: WEFAX & remote sensing satellite info wanted
To: info-hams@ucsd.edu
I've read somewhere that this stuff is pretty easy to receive. Can
someone send me some info?
Thanks,
 Joe
 Joe@parcplace.com
Joe McGuckin
                      oilean!joe@sgi.com
Island Software
                       joe@parcplace.com
(415) 969-5453
Date: 10 Apr 91 05:07:07 GMT
From: bloom-beacon!bu.edu!rpi!zaphod.mps.ohio-state.edu!unix.cis.pitt.edu!pitt!
w2xo!durham@ucbvax.berkelev.edu
To: info-hams@ucsd.edu
References <1991Mar30.174528.3952@ee.eng.ohio-state.edu>, <2659@ke4zv.UUCP>,
<1991Apr3.221445.19898@bellcore.bellcore.com>
Reply-To : durham@sei.cmu.edu (Jim Durham)
Subject : Re: frequency standards
In article <1991Apr3.221445.19898@bellcore.bellcore.com> karn@thumper.bellcore.com
writes:
>In article <2659@ke4zv.UUCP>, gary@ke4zv.UUCP (Gary Coffman) writes:
>|> Please be aware however, as the author
>|> of that article was not, that this technique is now worthless due
>|> to changes in the operating procedures and equipment of the networks
>|> and the local stations.
>Actually, it depends on your local TV station. Some do have good
>frequency standards. WMPB-TV, the PBS station near Baltimore MD, does
>have (or at least had) a cesium beam reference running their sync
>generator when I worked there. This station feeds a half dozen other
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Yes.. I also work at a PBS station (WQED, Pittsburgh), and we do not use frame syncs routinely in the or-air chain. The sync generators are driven from a rubidium standard. Also, recorded shows may be accurate also, as the new generation of video tape machines produces burst at the frequency of the house reference.

Like the man says, you just have to check your station. Some would be good, others not..

-Jim, W2XO (durham@w2xo.pgh.pa.us)
